Art. # 1551, 11 pages, https://doi.org/10.15700/saje.v38n2a1551

Filling gaps and expanding spaces – voices of student teachers on their developing teacher identity

William J Fraser

Department of Science, Mathematics and Technology Education, Faculty of Education, University of Pretoria, Pretoria, South Africa william.fraser@up.ac.za

It has often been said that any student engagement that is poorly monitored during teaching practice (TP) will not necessarily contribute much to their professional development and teacher identity. This applies specifically to initial undergraduate teacher training. This concern became the main focus of the study on which this article is reporting, as part of a broader project - FIRE (Fourth-year Initiative for Research in Education), which commenced in 2015. We wanted to determine how we could complement a community of practice engagement by using Participatory Reflection and Action (PRA) as intervention that could eventually contribute to the development of student teachers' teacher identity during teaching practice. This article reports on the outcomes of a study conducted on a sample of 2,309 final-year student teachers between 2015 and 2017 at a tertiary institution in Pretoria. Data were generated by participating student teachers during three-hour, on-campus workshops approximately a quarter of the way into their teaching practice. They were required to respond to a single question by addressing how student teachers perceive the roles of expert teachers in terms of their curriculum and subject knowledge, their expertise in teaching and learning, caring and providing learner support, and the managerial and professional skills of teachers. The results confirmed that PRA is a dynamic research and data collection strategy to create networks through which participants can benchmark their experiences against peers and other stakeholders. Furthermore, it is again confirmed that traditional TP experiences often fail to expose student teachers adequately to the full dynamics of the educational landscape, as certain interactions and activities are conflict-dependent, and only emerge when opposing and conflicting forces create imbalances and inequity. PRA drew our attention to serious flaws in our teacher training programmes, urging a reassessment of the objectives and actions of TP.

Keywords: community of practice; participatory reflection and action; subject methodology; teacher identity; teaching practice

Introduction

Teacher training programmes at South African universities and Teacher Training Institutions have been subjected to frequent transformation and change since the early nineties. The majority of these changes were not only politically and ideologically driven, but in some instances, the dysfunctionality of systems and practices also had to be addressed. For instance, when the Department of Higher Education and Training (DHET) introduced the minimum requirements for teacher education qualifications in 2011, one of the aims was to "regulate teacher education qualification programmes" (DHET, Republic of South Africa, 2011:5). However, not all changes were proven effective. Major curriculum changes thus followed, which stretched capacity, time and resources. All of the envisaged changes impacted the selection of appropriate space, subject content, subject methodologies and assessment practices. The physical restructuring of education also saw significant changes in teacher education. The incorporation of former provincial Teacher Training Colleges into universities (Jansen, 2002), and the standardisation of teacher training programmes (DHET, Republic of South Africa, 2011) brought along new requirements that had to be met by programme managers. Higher matriculation pass rates (Staff Writer, 2017) contribute to more students entering higher education institutions. These increases in student numbers, and especially student teacher numbers, strain resources, capacity, teaching, allocation, and supervision. Schools are stretched to the limit to accommodate student teachers, and managers and mentor lecturers seek alternative models and strategies to cope with the many students allocated to their fields of specialisation during teaching practice.

Teacher training institutions still apply numerous teaching practice models, but the most common denominator, or 'universal standard,' that continues to define the praxis of teaching practice contains components of monitoring and supervision. Apprenticeship models reflect classical post-positivist characteristics, meaning that trainees are assessed against a set of criteria after which the outcomes of the assessment are discussed with the participants. It is assumed that the shortcomings and defects will then be addressed and practice be improved. There are, however, many flaws in this model, the most important being the sensitive nature of the 'triad alliance' between student teachers, university lecturers and mentor teachers.

Apprenticeship models, however, often lack the much-required feedback, counselling and mentoring viewed by Kwan and Lopez-Real (2005) as the 'relational aspects of working together.' The main aim of the research was to give student teachers the opportunity to engage in a simple participatory mode of inquiry, such as Participatory Reflection and Action (PRA), and in doing so, experience the perceptions that they and their peers have regarding important expert roles, forces that shape their teacher identity, their own shortcomings, and the appropriate action one could take to address such inadequacies in a community of practice. We borrowed from Korthagen, Loughran and Russell (2006) the idea that student teachers have huge impact on one another during

peer-supported teaching and learning.

In 1986, Boydell directed our attention to the conflicting relationship between the three main role players that share 'collective space' (Miller, 1990:24) in the teaching practice relationship, namely, the student teacher, the mentor lecturer and the mentor teacher. What emerged during the early stages of the investigation was that not the mentor lecturer (supervisor), but the class teacher appears to have "a much stronger influence on the student's learning than the supervisor" (Boydell, 1986:116). The author supported her argument by drawing the reader's attention to the fact that groups of three appear to be uneven – and that any other two members could "form a coalition (to) isolate the third" (Boydell, 1986:117). Survival or 'selforiented' concerns appeared to be the prime concerns of student teachers entering the classroom for the first time (Boydell, 1986; Heeralal & Bayaga, 2011; Kwan & Lopez-Real, 2005). One solution to this problem was to supplement the apprenticeship approach with a model that would focus more on inquiry and activities that involve intensive reflection. Boydell (1986:123) noted the importance of 'reflection on practice' in 1986. Furthermore, she suggested that action should follow the reflections that emerge from student engagement. Walkington (2005) understands this argument well, and claims that reflection should remain a fundamental action in which teachers should engage, while Leijen, Allas, Toom, Husa, Marcos, Meijer, Knezic, Pedaste and Krull (2014) utilise guided reflection well to support the development of student teachers' practical knowledge. Bergold and Thomas (2012) distinguish between four 'reflection types,' of which reflection on personal attributes, reflection on social relationships, and reflection in a social field apply well to student teachers.

The Research Rationale

PRA is closely related to Participatory Action Research (PAR), which has become known for its emancipatory and empowering qualities (Chambers, 1994b:958; Von Maltzahn & Van der Riet, 2006:110). One could therefore claim that PRA would have similar properties due to its reflective and action-based qualities. We were looking for a strategy with dual research and developmental qualities that would possibly strengthen the development of student teachers' professional teacher identity. The original PRA model of Von Maltzahn and Van der Riet (2006) - which they phrased Participatory Rural Appraisal – served such a purpose (Fraser, Ferreira, Abrie, Van Heerden, Botha, Bosman, De Jager, Van Putten, Kazeni & Coetzee, 2016). We trusted that the strategy would have a "strong social justice orientation" as called for by Von Maltzahn and Van der Riet (2006:110), which would allow student teachers to construct knowledge within particular social contexts. We

finally hoped that the approach would allow researchers and student teachers to address emerging profession-related challenges and problems.

Taking into consideration the problems that led to the investigation, we decided in 2014 to engage our fourth-years students in small research projects where they had to establish how their own practices could affect classroom and school effectiveness. This also then became one of the prime aims of the investigation. Our understanding of Korthagen's (2001) definition of 'Practice-Theory' guided the assumption. Teachers build their own theory (t) when they retrieve evidence from their own smallscale investigations as opposed to the findings generated from large-scale studies (T). Kwan and Lopez-Real (2005:276) shared similar ideas when they argued that the "theory/practice divide should give way to a situation in which theory is both derived and confirmed from the practical experiences of the school and classroom."

It was for this reason that we selected a research strategy that would give participants the opportunity to talk about their experiences during teaching practice, and in doing so give us a glimpse of the dynamics of teaching practice that many of us have taken for granted. A better understanding of the forces driving the development of their teacher identities during this critical period of time would allow programme developers to revisit the envisaged objectives and outcomes of teaching practice.

Underpinning Theory The development of student teachers

The literature points to the fact that the professional development of student teachers concurs with the facilitation of subject knowledge, the application of specific strategies often used to reveal given phenomena and processes, and the acquisition of unique professional skills associated with the pedagogies of practice. The achievement of the curriculum objective is not divorced from subject syntax; for example, science educators are familiar with the fact that the teaching of science relates to exploratory strategies that give science education its unique characteristics (Capps & Crawford, 2013; Gaigher, Lederman & Lederman, 2014; Ramnarain, 2010). Finally, the development of teacher identity (or the 'self' as Day, Kington, Stobart & Sammons, 2006:601 put it) also depends on how teachers understand their learners. Renewed interest in socalled 'Pedagogical Content Knowledge (PCK)' confirms the importance of pedagogy as an impacting factor on quality teaching and learning. Best practices in dealing with primary and secondary school learners are often regarded as 'overarching competences' related to teacher identity. These roles are well described by Beijaard, Verloop and Vermunt (2000), who have explored

the three components in the context of teacher identity. They argue that teachers will always define themselves in terms of their understanding of teaching and learning strategies, command of the subject content, and knowledge of the cognitive demands of their learners (Fraser et al., 2016).

Student teachers and teachers therefore undergo developmental change during the course of their careers. Such changes have been accommodated in Clarke and Hollingsworth's (2002) quadruple professional growth model in which they claim that our beliefs and attitudes, our external working environment, and our work of practice constitute a domain of consequence. All of these experiences contribute to the development of a professional identity, which is regarded as the perception that teachers have of themselves, or also 'their-selves' (Verloop, 2003, in Lamote & Engels, 2010). For this reason, Clarke and Hollingsworth's (2002) model was accommodated in the conceptual framework of this study.

Research Method Applied during the Study The Conceptual Framework that Applied to the Study

Wenger's (1998) understanding of the composition of a Community of Practice and Engestrom's (2000) and Leontiev's (1981) Activity Theory informed this study. Community of Practice (work-integrated learning experience) defined student teachers' world of work while the Activity Theory demarcated the role players, stakeholders and activities that form part of teaching practice. Engestrom's (2000) model describes the elements of teaching practice (community of practice) in terms of the so-called tools, rules or guidelines, subjects, community, division of labour, and outcomes. Two additional dimensions informed the conceptual framework, namely, Shulman's (1987) understanding of the importance of Pedagogical Content Knowledge (PCK) to teaching, and the foundations of Participatory Reflection and Action (PRA) as research methodology. Shulman (1987) explained that PCK distinguished clearly between the content to be taught by the teacher, and the understanding of the pedagogy required, enhancing the retention of information. Understanding the nature of a subject in terms of substance and syntax during teaching and learning remains the essence of student teachers' world of work. It was thought that Participatory Reflection and Action (PRA) (Chambers, 1994a, 1994b; Naidoo, Duncan, Roos, Pillay & Bowman, 2007) would create capacity for student teachers to reflect on their own teaching experiences, talk about these experiences, and then devise action plans to address shortcomings and limitations.

We wanted to know from the participants how they perceived the expert roles linked to Subject Knowledge, Teaching and Learning Strategies, Learner Support (Caring Role), and Professional Classroom Management. The expert roles were drawn from the major roles that teachers normally engage in on a daily basis. Beijaard, Meijer and Verloop (2004), Beijaard et al. (2000), and Day et al. (2006:603) also reiterated the importance of aspects such as classroom management, subject knowledge and pupil test results when it comes to the development of identities.

As this study concerns the developing identities of student teachers, we were also led by Clarke and Hollingsworth's (2002) model of teachers' professional growth, as explained earlier in this article. The model applies specifically to student teachers' domain of practice where they, through so-called professional experimentation, reflect and enact their development (Clarke & Hollingsworth, 2002).

The Research Sample and Unit of Analysis

Since 2015, 2,309 fourth-year student teachers who have been attending the compulsory teaching practice component of the teacher-training programme at one higher education institution in South Africa, participated in the intervention (713 in 2015, 755 in 2016, and 841 in 2017). Thus far, the majority of the student pool has been female (on average 75%), with 25% being male. The student intakes became known as Block A and Block B students, and were reported as such in the results and also further down in the article.

The Research Process and Ethical Consideration Methodology and data collection strategy

Traditional Participatory Action Research was too complex and too time consuming, as the participants only had one month to introduce their action plans during the last quarter of teaching practice. Participatory Reflection and Action (PRA) (Chambers, 1994a, 1994b; Naidoo et al., 2007) was thought to be simpler, easier to implement, and yielding quicker results. Furthermore, the assumptions listed by Ferreira and Ebersöhn (2012) in support of PRA as a research methodology and data collection strategy fitted the intervention well. Accordingly, participants were taken as experts in terms of the information required, and expected to map their opinions regarding the tasks and functions (roles) of expert teachers, as highlighted in the first matrix (See Photo 1 and reference to Matrix 1). The second activity (see reference to Matrix 2) expected the participants not only to list the contribution of different sources to their developing identities, but also to quantify the importance of each contributor. This allowed the participants to identify prevailing gaps or spaces in their repertoire of tasks and functions that remain unaddressed. The third activity (see reference to Matrix 3) expected the participants to list two activities or action plans that they would implement during the last month of teaching practice to address the shortfalls that they identified in Matrix 2. This was prompted by Boydell's (1986:123) question: "How do you

stimulate reflection on efficacy of current practice and follow with action based on this reflection?" We hoped that these would address the practical challenges that emerged during teaching practice, and relied on the empowering property of PRA as the participants had to suggest a number of actions that are required to address the problems that they encountered during their teaching practice. All students returned to campus six weeks after the initial workshop to reflect on the outcomes of the two activities posted on Matrix 3. The outcomes of the school-based interventions were reported on in Matrix 4 during the second workshop.

All students were invited to attend two three-hour workshops on-campus during the second and third quarters of the year. Block A students did their teaching practice in the proximity of the university and were assessed by their mentor lecturers, while Block B students did their teaching practice at schools at venues of choice away from campus during the first term of the academic year. Their mentor teachers assessed their teaching. The supervision of students switched during the second semester to allow the initial Block B students to be supervised by their mentor lecturers closer to

campus. We attempted to cluster the students from the Foundation Phase, Intermediate Phase, Senior Phase, and Further Education and Training Phase programmes into small groups, according to their subjects and fields of specialisation where they would feel comfortable to talk about sensitive issues personal experiences. Referring 'communicative and safe spaces' specifically, Bergold and Thomas (2012), as well as Rönnerman, Edwards-Groves and Grootenboer (2015) explain why communicative spaces are required to be 'enabling' or empowering. We trusted that the participants would, in terms of the validity claims of Habermas (in McCarthy, 1978:290), base their reflections on "comprehensibility, truth, truthfulness and rightness."

We encouraged the participants at the workshops to reflect on each of the questions that formed part of the four matrices, as set out in Table 1. We talked the participants through the questions and activities, and also prompted groups to clarify and justify their reflections. Each group leader then reported on the group's reflections at the end of each session.



Photo 1 Completed Matrix 1 where participants reported on the four listed expert roles

Table 1 Main tasks and functions of the data capturing instruments (matrices or posters)

Matrix	Task and Function
1	Mapping student teachers' opinions on the four Teacher Expert Roles: group member had to reflect on the
	teacher they would like to be by focusing on the teacher as subject expert (understanding subject matter or
	content); the teacher as teaching and learning expert; the teacher as caring expert; and the teacher as
	professional and managing expert. Sub-question: What is the group's opinion regarding the characteristics of
	an expert teacher in terms of the four roles listed? Rank the four expert roles in order of importance.
2	Mapping and quantifying the role of stakeholders (sources) in terms of their identity development. Sub-
	question: List the sources that informed the development of your teacher identity and explain the contribution
	of each.
3	Mapping Action Plans: list a number of activities that the group will perform back at school to address the
	limitations and shortcomings they have identified. <i>Instruction: Identify two gaps in your developing teacher</i>
	identity and propose two action plans you would implement back at school to address these shortcomings.
4	Mapping the outcomes of the selected action plans. Sub-question: How did your participation in the two
	activities help to clarify the shortcoming you experienced during teaching practice?

Faculty management and the Ethics Committee of the Faculty of Education granted us permission to engage university students in the intervention.

Transcription and analysis of the data

Data from the four matrices were transcribed followed by the clustering of the reflections in terms of consistencies and contradictions. In analysing the data, an inductive thematic approach was followed as proposed by Mason (2002) as well as inductive-deductive options described by Cohen, Manion and Morrison (2007). For this purpose, data on each of the four expert roles were analysed across the various groups, identifying recurring themes and subthemes.

Results

Introduction

The results were collected in four matrices (posters) that served as data collection instruments. The groups were numbered and the four completed matrices (three from the first workshop and the fourth from the second workshop) were analysed as a unit. We transcribed the data and followed inductive and deductive approaches in the search for similarities and differences as explained earlier. These emerging patters were used to explore the participants' awareness of their developing identities and also to come to a better understanding of the existing gaps or spaces that still need further development. The findings reflect the year of application, the Block (A or B) that applied, as well as the group number. The data from the first matrix reported on the kind of teacher the participants would have liked to be in terms of subject specialisation, teaching and learning, caring expert (including learner support), and management (professional role). They then linked areas lacking development to the four expert roles and also indicated where development was ongoing. The data from the second matrix not only reflected the roles of different stakeholders in terms of their professional and identity development, but also revealed the importance of each in terms of function. The last matrix reported on the actions that each group suggested addressing the gaps that required immediate attention. The final matrix reported on the success that the participants experienced with the implemented action plans.

The Teacher as a Subject Expert

We invested in Day's (2004:9) position that the best teachers at all levels are those who have strong intellectual and emotional identities and commitments both to their subject(s) and to their students. Day et al. (2006:604) further emphasised that "a positive sense of identity with subject, relationships and roles" is important to maintain an identity.

Participants had a good understanding of what was required from them in terms of subject knowledge. One group (2015/A/6) reported a basic premise claiming that 'a teacher's role as subject expert requires one to know and understand the content of the subject.' This knowledge ranges from having a broad knowledge base to specific knowledge (2015/A/24; 25; 28; B/71; 75). Other groups (2015/A/12; 23; 24; 29; B/71) reported on the importance of consulting different resources, and relating to what is being taught, and appreciated the importance of conducting research to remain in command of the subject. Many also reported the importance of remaining life-long learners and understanding the 'rules' set out in the national curriculum statements (2015/A/14; 18; 25; 26; 27; B/70). To many, it meant remaining relevant and updated, and being able to accommodate change (2015/A/27; 28; 30). The groups (2015/A/18; 25; 28) saw it as important to be able to answer learners' questions, and to inspire learners through teachers' passion and subject knowledge.

The Teacher as a Teaching and Learning Expert The participants not only reflected on which teaching and learning strategies an expert would use, but also how teaching and learning need to be conducted, as well as the conditions fit for their application. Some groups suggested that experts should move away from using textbooks only (2015/B/71) and also indicated the importance of enthusiastic engagement, interaction, approachability and adaptability (2015/B/71; 84; 87). The

groups also regarded a focus on group work as an indication of a more mature approach to teaching and learning (2015/B/71), while the accommodation of learners' different learning styles was also seen as an advantage (2015/B/72; 80; 81; 2016/B/61). Good communication skills (2015/B/73; 75) were also regarded as an asset to expert teaching, while the variation of techniques and strategies was thought to be an advantage by some groups (2015/B/75; 80; 82; 83; 84; 86; 2016/B/61). The groups also saw diversification as valuable asset in achieving excellence (2015/B/81).

The Teacher as a Caring Expert

One has to agree with Beijaard et al. (2000:3) that "teaching is much more than the transmission of knowledge." It was for this reason that we saw the caring role of the teacher as an important component of identity, which links to the teacher's pedagogical expert role, justifying its inclusion in the matrix. Our decision links well to Day's (2004:2) explanation as to why we should not ignore the caring role of the teacher, who posit that passionate teachers will be aware of the challenge of the broader social contexts in which they teach, harbour a clear sense of identity, and believe that they can make a difference to the learning and achievement of their pupils. These teachers care deeply about their pupils and like them. They will also care about how and what they teach and are typically curious to learn more about both in order to become and remain more than merely competent.

The participants in this study argued that teachers in caring capacities should be acquainted with the cultural characteristics, the socioeconomical backgrounds, as well as with specific environmental issues that are usually associated with learners from a particular setting or community (2016/B/7). One group listed that one has to find ways to learn about each other's backgrounds and be aware of each individual child's need (2016/B/27; 61). Another group raised the importance of 'sharing,' arguing, 'you might be the only person they look up to' (2016/B/43). They also realised that the creation of a safe learning environment is a prerequisite for the achievement of educational aims and objectives (2017/B/8).

The Teacher as a Professional and Managing Expert

Many of the participants argued that in becoming a professional, it is important to have a good understanding of learners' home and socio-economic environments. This background knowledge was a critical impact factor when planning teaching and learning in the classroom, especially when having to integrate components from learners' life-worlds into the curriculum. Student teachers saw the importance of being accessible to learners. It became possible from the findings to link professionalisation with

aspects such as confidence, good relationships (2016/B/7; 61) credibility, passion, communication (2016/B/43), adaptability, mutual respect (2017/B/7; 27), life-long learning, every-day learners, independence, accommodation, research, and leadership. What emerged from another group's close association with the school community during teaching practice was the need to establish good professional relationships with colleagues, parents and students (2016/B/8).

Towards the end of the first activity, we requested the participants to rank the importance of each of the four roles of expected excellence in terms of their own experience and expectations. One of the intake cohorts consisting of Foundation Phase and Intermediate Phase students attached the highest value to the caring and supportive role of the teacher, followed by professionalism, teaching and learning, and subject specialisation, consecutively. A quick analysis of the opinions of the Senior and Further Education and Training students revealed the opposite. They attached more value to becoming subject experts than becoming caring experts. Our excitement grew on recognising a potentially emergent pattern, but as our analyses ultimately concluded that we could not draw clear associations between student teachers' phase specialisation and preference for a specific expert role. However, Day et al. (2006:605) looking specifically at the primary teacher's role, draw our attention to "the tensions and contradictions between the impulse to 'care and nurture,' and the impulse ... to 'control."

Sources and Forces Informing the Student Teachers' Developing Identities

Lamote and Engels (2010) agree that student teachers are exposed to the expectations of various external sources such as "teacher educators, colleagues, head teachers, (and) the government through national standards," and that these expectations are embedded in teachers' professional identity, resulting in them striving to meet such stipulated expectations. The participants acknowledged the fact that various factors affected their professional development during teaching practice. One of the groups had the following to say:

Through this study, we identified the importance of the relationship between teacher's identity formation and surrounding factors. We have understood the importance of certain practices such as building a positive ongoing relationship (with) the (fellow) student teachers, with our families, school and community.

Various stakeholders and forces affected the development of participants' identities since the interception of the study in 2015. The groups were reasonably unanimous that various sources or factors affected the development of their teacher identities significantly. These are: previous teachers; mentor teachers; mentor lecturers; the university; family and friends; and their own acquired

experiences. However, the student teachers' reflected experiences showed consistency, claiming that the effect of mentor lecturers or methodology lecturers on their development had not always been that favourable. For this reason, we also focus on the mentoring role of mentor lecturers in the following paragraph. The participants had high expectations of their mentor teachers and thought them to be influential in their development. Nevertheless, such discrepancies between their expectations and experiences emerged as paradoxes. A discussion of these observations will follow in the next paragraph.

Gaps and Spaces in the Development of Fourthyear Students' Teacher Identities

One of the advantages of PRA was that the action plans and interventions allowed the participants to assess their own progress in terms of the documented expert roles. Moreover, as the implementation of the action plans progressed, it allowed them to come to terms with the shortcomings or classical limitations that beginner teachers would experience. One group summarised their observations as follows:

In this research, we also saw the shortcomings that we faced as student teachers who were doing their teaching practice for the first time and by seeing those short comings, we got information on where to improve in order to add value in our profession. We conducted the interview with the principal and with the mentor teachers at the schools where we were doing our teaching practical. As a result, we now know what the management of the school will expect from us when we start working.

We clustered the limitations that the three cohorts (2015–2017) of student teachers experienced during teaching practice into the following five broad categories:

- Limitations due to information, competences and skills not acquired during formal training, including the following: lacking subject content knowledge (2016/B/7); limitations in terms of teacher strategies and teaching styles; limited understanding of how learners read; challenges with classroom discipline; inadequate special needs education skills; limited understanding of learner nutrition; and need for better communication skills.
- 2) Formal training in theoretical knowledge and applications, yet with the development of skills only occurring during classroom teaching and learning, in terms of the following: learner support; establishing concepts; and dealing with challenges of curriculum differentiation.
- 3) Competences and skills that can only be acquired during hands-on engagement with stakeholders during teaching, related to the following: proper classroom management; weak relationships with parents; parental involvement; unsatisfactory time management; classroom discipline; understanding Curriculum Assessment Policy Statements (CAPS); dealing with learner absenteeism; having difficulty in balancing social and work life; and managing poor learner behaviour.
- 4) Limitations in terms of competences and skills not

- regarded as tasks and functions of specific programmes and stakeholders, more specifically in relation to the following: development of teacher identities; working outside the framework (box); and breaking with formality.
- Expectations of participants that had not been met by stakeholders, in particular with regards to poorly guided professional encouragement and support (2016/B/7).

The participants were very specific in term of the problems they experienced during the studentmentor lecturer interactions. One group remarked that some mentor lecturers were no longer aware of the requirements of practice, that they had unrealistic expectations, and that they had not always been accessible for consultation. Another group criticised the absence of moral and spiritual support, as well as the impersonal demeanour of the mentor lecturers, their lack of involvement, and apparent poor communication styles. One participant spoke about her/his 'worst experience ever,' while a group lamented the inconsistency of the mentor lecturer. Kwan and Lopez-Real (2005) describe four prominently ranked mentor roles. These are, in order of prominence: 'provider of feedback,' 'counsellor,' 'observer,' and 'role model.' It is interesting to note that the three managerial roles, namely, 'quality controller,' 'manager' and 'assessor' occupied the lowest positions on the ranking scale. The student teachers' concerns are better understood if we take heed of Kwan and Lopez-Real's (2005) argument that judgemental roles and functions conflict with inter-personal roles such as feedback, support, and help. Furthermore, the concerns and criticism listed earlier in this paragraph are better understood if one weighs them against Izadinia's (2016) components of a good mentoring relationship. Izadinia (2016) describes the importance of encouragement and support, open communication, and feedback, as opposed to the traditional quality assurance and assessment approach taken by many mentors. These elements are, according to Izadinia (2016), essential for the establishment of a positive mentoring relationship.

Actions Taken by Student Teachers

The participants had to come forward at the end of the first workshop with action plans that they would implement to improve practice, prior to attending the second scheduled workshop. The following topics and themes emerged prominently over the three years:

Mastering more classroom management skills (2016/A/7; 44; 59; 60; 61; 66; 70; 71; 2017/A/4; 6; 7; 12; 16; 19; 24); Improve self-motivation (2016/A/21); Acquire more teaching and learning strategies (2016/A/7; 48; 2017/A/10; 13; 22); Improve planning and preparation skills (2017/A/7; 17); Adaptation of the curriculum and curriculum differentiation (2016/A/66; 2017/A/5; 17); Improving time management skills (2016/A/61; 62;

2017/A/2; 4; 17); Development of classroom discipline skills (2016/A/8; 9; 34; 44; 69; 2017/A/2; 17; 23); Improve teamwork (2016/A/70); Linking content to real-life situations (2016/A/60); Selection of appropriate subject content (2017/A/3); Becoming more patient (2016/A/8); Rendering better support to learners (2016/A/9; 2017/A/8; 12; 18; 19); Understanding learners better (2016/B/34); Acquire more resources (2016/A/40; 2017/A/24); Improvement of assessment skills (2016/A/48); Enhance approachability yet remain professional (2016/A/59); Enhance professionalisation (2016/A/69); Improving relationship with parents (2017/A/13: 21): Better understanding of how Learners Read (2017/A/16); Role model identities of teachers (2012/A/21); Understanding when to follow your own rules (2017/A/3); Strengthening conceptualisation (2017/A/1); Understanding the needs of sick children (2017/A/5); Managing bad learner behaviour (2017/A/8); Becoming more flexible and adaptable (2017/A/9); and improving communication skills (2017/A/10).

The participants found that the implemented action plans were successful in dealing with pitfalls and limitations. They were asked to report on the effectiveness of the action plans and one of the groups reflected as follows:

The implementation of actions contributed greatly to the development of our identities as a leader. It taught us how to become effective teacher in the classroom because we became aware of the different factors that could influence our learners. Working together with the community and staff members provided us with a sense of belonging and a sense of purpose. Throughout our implementation, we built stronger relationships with the participating role players such as colleagues, mentor teachers and parents and learners. We found that our reflective process was crucial for our identity formation, because satisfactory results provided us with a good sense of self. Reflecting back on the entire process gave us a variety of solutions to consider.

It is for this reason that Day (2004:7) has argued that "to be a professional means having a lifelong commitment to inquiring practice."

Feedback on the implemented action plans and activities

The reader will recall that the groups had to implement the selected action plans during the remaining five weeks of teaching practice. The main purpose was to determine the extent to which the action plans could enhance the professional development of student teachers in the areas of neglect.

Feedback from the groups in workshops linked to the teaching practice period was very positive and many thought that the activities had been extremely beneficial to their professional development. One even argued that the mentorship specifically contributed to his/her own identity. One agreed that

he/she had learnt more during the practical period than in the three years at university, while another recommended that one has to be 'open for new knowledge' and be pre-pared to 'engage in more self-reflection about your own progress in the class setting' during teaching practice.

Reflections on the way forward

When the participants were requested to rate the importance of the different expert roles at the commencement of the teaching practice, the majority highly emphasised the importance of adequate guidance and mentoring on subject content knowledge and teaching and learning strategies. This is what Kwan and Lopez-Real (2005:282) refer to as "survival strategies" for student teachers. Gibson (1976, in Boydell, 1986:119) shared a similar experience, and noticed that students move away from the notion of "teaching as service" towards a view of school practice, as a time for "safety and survival." There was little emphasis on their own professional development, or on the development of the school, and the community. Their immediate concern fell on their own performance in the classroom, good grades and a secure pass. It was only during this final stage of the intervention where we noticed a more critical stance towards their own professional development and interactions outside the classroom.

Members from Group 87 (2015/B) committed themselves as lifelong learners who would never hesitate to consult colleagues for advice. Groups 88, 89 and 91 (2015/B) stressed the importance of communication and also consulting more with colleagues and peers, while ongoing research also emerged as a vision for the future. The setting up of functional networks with fellow (2015/B/90; 91) was also a dream of two groups, as well as a closer working association with learners to determine their needs (2015/B/90). Yet another group realised the importance of multiple teaching and learning strategies, the creation of a better learning space, and the attendance of conferences (2015/B/93). Many understood the importance of advanced educational technology and e-learning environments well, suggesting that this would be a futuristic route to take (2015/B/94). Some realised the importance of further studies, not only in terms of academic skills development, but also to be of more value extramurally (2015/B/95). Members of Group 97 (2015/B) saw themselves developing as the best teachers within their abilities, while Group 98 (2015/B) saw the importance of including parents and their views on classroom management and learning support.

Finally, two groups emphasised the value of Participatory, Reflection and Action in their professional development as follows:

This project and the module as a whole have helped us to know precisely what the teaching community expects of us. Moreover, it has given us great enlightenment in terms of knowing that not only does the teaching staff contribute to school effectiveness but also the non-teaching community, parents included.

As for our personal development, we have gained so much in terms of the importance of subject knowledge and teaching creativity. We see this research report as a good preparation for postgraduate studies, it has polished our research skills and in a way enabled us to improve our skills of writing an assignment.

Discussion

Leijen et al. (2014:315) caution readers that reflection on practice (and not in practice) is often disappointing as it often results in "mere descriptions of practice and not a critical evaluation or re-framing of their understandings." However, the use of PRA as a strategy to 'reflect on practice' was quite effective, as it gave the participants a better understanding of their developing teacher identities.

If we accept the definition that professional identity is the perception that teachers have (or should have) of themselves (Verloop, 2003, in Lamote & Engels, 2010), then one has to agree that student teachers enter teacher-training programmes with a reasonably good understanding of their expected roles and functions as educators. Past teaching and pre-service experiences have exposed them to a plethora of perceptions that became the standard or description of practice with which they identified themselves.

The PRA interventions served their purpose in creating a platform where participants could reflect on current practice, and in doing so, weigh for the first time their perceived professional competences against the benchmarked standards set by their peers and the profession. Day et al. (2006) remarked during the construction of the self (identity) individuals will "create a defining system of concepts" and that these concepts "were developed through the subjectively interpreted feedback from others ...," and it was for this reason that we valued the importance of peer feedback. It was not the intention of the study to assess and measure changing identity over time, but to allow participants to reflect on prevailing shortcomings and devise actions plans that would provide some solution to work-related challenges. PRA created a 'window of opportunity' for student teachers through which they shared ideas and experiences cooperatively, identified common shortfalls, and planned actions to address such pitfalls. However, classroom-based teaching and learning cannot expose student teachers to the full dynamics of the classroom environment, as certain interactions and activities are "conflict-dependent" and only emerge when 'opposing and conflicting forces create imbalances and inequity by challenging existing practice.' Greene (1986) referred to the importance of such challenges, where according to the author spaces can be created through which dialogue can contribute towards freedom and emancipation.

The following comment from one of the groups illustrates the success that the members experienced with the FIRE-project during the intervention.

The research opened our minds. We are now able to think outside of the box. In this research, we have acquired new knowledge, values and skills. We have learnt to work with one another, which will help us in the workplace in order to be able to work with other teachers so that we can produce equipped learners with good results. We were able to acquire the listening, communication, critical thinking and cooperative skills and with these skills we can be able to create an effective classroom.

Conclusion

The revelations of this study were by no means canonical, nor will the findings alter the course of teaching practice at teacher training institutions. However, small paradigmatic, methodological and conceptual changes could impact on the quality of teaching practice as a community of practice.

Acknowledgements

I thank the National Research Foundation (NRF) - https://doi.org/10.13039/501100001321 - for funding the project, Prof. Ronel Ferreira who designed and led the PAR interventions, and the 14 co-researchers who assisted with and participated in the on-campus PAR workshops.

Note

i. Published under a Creative Commons Attribution Licence.

References

Beijaard D, Meijer PC & Verloop N 2004. Reconsidering research on teachers' professional identity. *Teaching and Teacher Education*, 20(2):107–128. https://doi.org/10.1016/j.tate.2003.07.001

Beijaard D, Verloop N & Vermunt JD 2000. Teachers' perceptions of professional identity: An exploratory study from a personal knowledge perspective. *Teaching and Teacher Education*, 16(7):749–764. https://doi.org/10.1016/S0742-051X(00)00023-8

Bergold J & Thomas S 2012. Participatory research methods: A methodological approach in motion. *Historical Social Research*, 37(4):191–222.

Boydell D 1986. Issues in teaching practice supervision research: A review of the literature. *Teaching and Teacher Education*, 2(2):115–125. https://doi.org/10.1016/0742-051X(86)90010-7

Capps DK & Crawford BA 2013. Inquiry-based professional development: What does it take to support teachers in learning about inquiry and nature of science? *International Journal of Science Education*, 35(12):1947–1978. https://doi.org/10.1080/09500693.2012.760209

Chambers R 1994a. Participatory rural appraisal (PRA): Challenges, potentials and paradigm. *World Development*, 22(10):1437–1454. https://doi.org/10.1016/0305-750X(94)90030-2

Chambers R 1994b. The origins and practice of participatory rural appraisal. *World Development*,

- 22(7):953–969. https://doi.org/10.1016/0305-750X(94)90141-4
- Clarke D & Hollingsworth H 2002. Elaborating a model of teacher professional growth. *Teacher and Teacher Education*, 18(8):947–967. https://doi.org/10.1016/S0742-051X(02)00053-7
- Cohen L, Manion L & Morrison 2007. *Research methods* in education (6th ed). London, England: Routledge.
- Day C 2004. *A passion for teaching*. London, England: RoutledgeFalmer.
- Day C, Kington A, Stobart G & Sammons P 2006. The personal and professional selves of teachers: Stable and unstable identities. *British Educational Research Journal*, 32(4):601–616. https://doi.org/10.1080/01411920600775316
- Department of Higher Education and Training, Republic of South Africa 2011. National qualification framework act (67/2008): Policy on the minimum requirements for teacher education qualifications. *Government Gazette*, 553(34467):1-64, July 15. Available at http://www.dhet.gov.za/Teacher%20Education/Policy%20on%20Minimum%20Requirements%20for%20Teacher%20Education%20Qualifications%20(2011),%2022%20July%202011.pdf. Accessed 15 January 2018.
- Engestrom Y 2000. Activity theory as a framework for analyzing and redesigning work. *Ergonomics*, 43(7):960–974.
 - https://doi.org/10.1080/001401300409143
- Ferreira R & Ebersöhn L 2012. *Partnering for resilience*. Pretoria, South Africa: Van Schaik.
- Fraser W, Ferreira R, Abrie M, Van Heerden J, Botha M, Bosman L, De Jager L, Van Putten S, Kazeni M & Coetzee S 2016. The views of student teachers on the development of their teacher identities. In LG Chova, AL Martínez & IC Tores (eds). *Edulearn 16 Proceedings*. Valencia, Spain: IATED Academy.
- https://doi.org/10.21125/edulearn.2016.0348
 Gaigher E, Lederman N & Lederman J 2014. Knowledge about inquiry: A study in South African high schools. *International Journal of Science Education*, 36(18):3125–3147.

https://doi.org/10.1080/09500693.2014.954156

- Greene M 1986. Reflection and passion in teaching.

 Journal of Curriculum and Supervision, 2(1):68–
- Heeralal PJ & Bayaga A 2011. Pre-service teachers' experiences of teaching practice: Case of South African university. *Journal of Social Sciences*, 28(2):99–105. Available at http://www.krepublishers.com/02-Journals/JSS/JSS-28-0-000-11-Web/JSS-28-2-000-2011-Abst-Pdf/JSS-28-2-099-11-1202-Heeralal-P-J/JSS-28-2-099-11-1202-Heeralal-P-J/JSS-28-2-099-11-1202-Heeralal-P-J-Tt.pdf. Accessed 18 December 2017.
- Izadinia M 2016. Student teachers' and mentor teachers' perceptions and expectations of a mentoring relationship: Do they match or clash? *Professional Development in Education*, 42(3):387–402. https://doi.org/10.1080/19415257.2014.994136
- Jansen JD (ed.) 2002. Mergers in higher education.

 Lessons learned in transitional contexts. Pretoria,
 South Africa: University of South Africa.
- Korthagen F, Loughran J & Russell T 2006. Developing

- fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22(8):1020–1041. https://doi.org/10.1016/j.tate.2006.04.022
- Korthagen FAJ 2001. Linking practice and theory: The pedagogy of realistic teacher education. Mahwah, NJ: Lawrence Erlbaum Associates.
- Kwan T & Lopez-Real F 2005. Mentors' perceptions of their roles in mentoring student teachers. Asia-Pacific Journal of Teacher Education, 33(3):275– 287. https://doi.org/10.1080/13598660500286267
- Lamote C & Engels N 2010. The development of student teachers' professional identity. *European Journal of Teacher Education*, 33(1):3–18. https://doi.org/10.1080/02619760903457735
- Leijen Ä, Allas R, Toom A, Husa J, Marcos JJM, Meijer P, Knezic D, Pedaste M & Krull E 2014. Guided reflection for supporting the development of student teachers' practical knowledge. *Procedia Social and Behavioral Sciences*, 112:314–322. https://doi.org/10.1016/j.sbspro.2014.01.1170
- Leontiev AA 1981. *Psychology and the language learning process*. Oxford, England: Pergamon Press.
- Mason J 2002. *Qualitative researching* (2nd ed). London, England: Sage.
- McCarthy T 1978. *The critical theory of Jürgen Habermas*. Cambridge, MA: The MIT Press.
- Miller JL 1990. Creating spaces and finding voices: Teacher collaborating for empowerment. Albany, NY: State University of New York Press.
- Naidoo A, Duncan N, Roos V, Pillay J & Bowman B 2007. Analysis, context and action: An introduction to community psychology. In N Duncan, B Bowman, A Naidoo, J Pillay & V Roos (eds). Community psychology: Analysis, context and action. Cape Town, South Africa: UCT Press.
- Ramnarain U (ed.) 2010. Teaching scientific investigations. Northlands, South Africa: Macmillan.
- Rönnerman K, Edwards-Groves C & Grootenboer P 2015. Opening up communicative spaces for discussion 'quality practice' in early childhood education through middle leadership. *Nordic Journal of Studies in Educational Policy*, 2015(3):Article 30098. https://doi.org/10.3402/nstep.v1.30098
- Shulman L 1987. Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1):1–23.
 - https://doi.org/10.17763/haer.57.1.j463w79r56455
- Staff Writer 2017. South Africa's matric pass rate history: 1995 2016. *BusinessTech*, 4 January. Available at https://businesstech.co.za/news/lifestyle/148821/so uth-africas-matric-pass-rate-history-1995-2016/. Accessed 9 January 2018.
- Von Maltzahn R & Van der Riet M 2006. A critical reflection on participatory methods as an alternative mode of enquiry. *New Voices in Psychology*, 2(1):108–128.
- Walkington J 2005. Becoming a teacher: Encouraging development of teacher identity through reflective practice. *Asia-Pacific Journal of Teacher Education*, 33(1):53–64. https://doi.org/10.1080/1359866052000341124

Wenger E 1998. Communities of practice: Learning, meaning, and identity. Cambridge, England:

Cambridge University Press.